

**APPENDIX**  
**Claims Appealed**

1. A macrophage infecting parasite which is a strain of *Leishmania* and which is transformed by a plasmid containing a granulocyte macrophage colony stimulating factor (GM-CSF) gene and which parasite expresses GM-CSF.
3. The parasite of claim 1 wherein said strain of *Leishmania* is selected from the group consisting of *Leishmania donovani*, *Leishmania braziliensis*, *Leishmania tarentolae*, *Leishmania major*, *Leishmania mexicana*, *Leishmania tropica* and *Leishmania aethiopica*.
4. The parasite of claim 3 which is reduced in the ability of said strain to infect or survive within macrophages.
5. The parasite of claim 1 wherein said GM-CSF gene is of murine origin.
6. The parasite of claim 1 wherein said GM-CSF gene is of human origin.
7. The parasite of claim 1 wherein said GM-CSF gene is expressed using the  $\alpha$ -tubulin intergenic sequences of *Leishmania enrietti*.
9. The parasite of claim 1 wherein at least one gene of the parasite contributing to virulence thereof has been functionally disabled.
10. The parasite of claim 1 which expresses at least one additional cytokine.
21. A macrophage infecting parasite which is a strain of *Leishmania* selected from the group consisting of *Leishmania donovani* and *Leishmania major* and which has been transformed by a plasmid vector selected from the group consisting of pneo-mGM CSF and pneo-hGM CSF and which expresses a granulocyte macrophage colony stimulating factor (GM-CSF).